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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,946	10/27/2004	Wolfgang Lortz	259943US0X PCT	1487
22850	7590	10/09/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER FISHER, ABIGAIL L	
			ART UNIT	PAPER NUMBER
			1616	
			NOTIFICATION DATE	DELIVERY MODE
			10/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/510,946	Applicant(s) LORTZ ET AL.	
	Examiner ABIGAIL FISHER	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9-11, 14, 15 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12, 13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/21/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of Amendments/Remarks filed on July 25 2008 is acknowledged. Claims 1-6 and 12-14 were amended. Claims 16-19 were added. Claims 1-19 are pending. Claims 9-11, 14-15 and 17-19 are withdrawn as being directed to a non-elected invention. Claims 1-8, 12-13 and 16 are directed to the elected invention.

Newly submitted claims 17-19 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: In the response to the Requirement for Restriction/Election filed on October 9 2007, a species election was set forth and applicant elected titanium dioxide.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 17-19 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 5/21/08 was considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8, 12-13 and 16 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Applicants have amended claim 1 to recite that the dispersion of oxide particles having an arithmetic mean particle size of at least 131 nm. This limitation includes all values above 131 nm. Applicants have indicated that support for this amendment can be found in Table 2. Applicants have support for 131, 156, 197, 142, 239 and 191 (which comes from examples 1-3 of sample 3, example 3 of sample 2, and examples 2-3 of sample 1). It is noted that other examples for different samples are presented but they do not have the median particle size required by instant claim 1. Therefore, applicants have support for these specific arithmetic mean particle sizes but not for the broad range as instantly claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7, 12-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elsom et al. (WO 90/11067, cited in the Office action mailed on April 25 2008) in view of Gilges et al. (US Patent NO. 6413490, cited in the Office action mailed on April 25 2008), Grinnell (US Patent No. 5799978, cited in the Office action mailed on April 25 2008), Towery et al. (US Patent No. 6464740, cited

in the Office action mailed on April 25 2008) and Dobkowski et al. (US Patent No. 5961961).

Applicant Claims

Applicants claim an aqueous dispersion containing pyrogenically produced oxide particles of titanium, zinc, iron, or cerium, having an average particle size of less than 200 nm and an arithmetic mean particle size of at least 131 nm. The particle sizes of the oxide particles are not distributed symmetrically in the dispersion. The dispersion contains as a dispersing agent at least one (poly)phosphate. The pH is from 4.5 to 7.5. It is noted that applicant has elected titanium dioxide as the elected species of the oxide particles and sodium tripolyphosphate as the dispersing agent.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Elsom et al. is directed to a sunscreen composition which comprises a blend of different particle size of titanium dioxide (abstract). The particle size of the titanium dioxide is between 1 and 100 nm (page 3, lines 10-13). Larger particles are associated with whiteness which greatly reduces their utility in cosmetic sunscreen compositions (page 1, lines 17-19). The particles may be uncoated or may be **coated** with an aluminum compound such as aluminum oxide, **aluminum stearate**, aluminum laurate or a **phospholipid** (page 3, lines 14-18). It is disclosed that commercially available titanium dioxide contains a distribution of particle sizes around a mean primary particle size but none alone provide the desired characteristics which is a blend of different particle sizes (page 3-4, lines 31-34 and 1-4). Preferably the composition comprises three different grades of titanium dioxide each having a different mean particle size.

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Example 1 comprises titanium dioxide with a mean particle size of 15 nm in 2 %, titanium dioxide with a mean particle size of 35 nm in 5%, and titanium dioxide with a mean particle size of 50 nm in 3%. While not explicitly utilizing the terminology "not distributed symmetrically", the example clearly indicates that different particle sizes as well as percentages are utilized therefore the particle sizes are necessarily not distributed symmetrically. It is disclosed that the amount of titanium dioxide depends on the use for which the composition is intended but generally the ranges is from 0.5 to 30%. The composition additionally comprises an emulsifier (also known as dispersant) in an amount from 1 to 20% for use in water-in-oil or oil-in water emulsions (page 5, lines 11-22). It is disclosed that the composition may additionally comprise other component well known to those in the art such as emollients, moisturizers, humectants, etc. (page 7-18, lines 29-36 and 1-16). All of these are auxiliary substances or additives.

**Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)**

Elsom et al. does specify that the titanium dioxide is pyrogenically produced. However, this deficiency is cured by Gilges et al.

Gilges et al. is directed to granules based on pyrogenic titanium dioxide (title). The granules are utilized in cosmetics such as sunscreens (abstract). It is disclosed that pyrogenic titanium dioxide is characterized by extremely finely divided particles, a high surface area, very high purity, spherically shaped particles and a lack of pores (Column 1, lines 21-24). The average particle diameter taught is from 10 to 150

Elsom et al. does not specify that the emulsifier is sodium tripolyphosphate. However, this deficiency is cured by Grinnell.

Grinnell discloses that to disperse pigments, which includes titanium dioxide, dispersing agents are utilized. The dispersing agents polyphosphate compounds such as tetrasodium pyrophosphate, sodium hexametaphosphate and sodium tripolyphosphate (column 5, lines 33-36).

Elsom et al. does not specify the pH of the composition. However, this deficiency is cured by Towery et al.

Towery et al. is directed aqueous metal oxide slurries. It is disclosed that adjusting the pH such that a sufficiently high zeta potential is realized imparts stability through columbic interactions (column 3, lines 22-25). It further disclosed that the pH is adjusted to maintain a stable colloid suspension and the pH is adjusted to obtain the required zeta potential on the surface of the oxide particles. The pH is on the order of 0.5 to 11 (column 12, lines 6-12).

Elsom et al. does not specify a particular arithmetic mean particle size. However, this deficiency is cured by Dobkowski et al.

Dobkowski et al. is directed to sunscreen compositions comprising titanium dioxide. It is taught that a boost in sun protective activity can be achieved by the inclusion of large particle size inorganic sunscreen agents (column 2, lines 34-37).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art to combine the teachings of Elsom et al. and Gilges et al. and utilize pyrogenically produced titanium

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dioxide. One of ordinary skill in the art would have been motivated to utilize this type of titanium dioxide because it possesses a high surface area and very high purity as taught by Gilges et al.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Elsom et al. and Grinnell and utilize sodium tripolyphosphate to disperse titanium dioxide. One of ordinary skill in the art would have been motivated to utilize this dispersing agent because Grinnell teaches that it is a dispersing agent for titanium dioxide. It would have been obvious to one of ordinary skill in the art to try sodium tripolyphosphate as the dispersing agent as a person with ordinary skill has good reason to pursue known options within his or her technical grasp, such as dispersants of titanium dioxide. **Note: MPEP 2141 [R-6] *KSR International CO. v. Teleflex Inc.* 82 USPQ 2d 1385 (Supreme Court 2007).**

It would have been obvious to one of ordinary skill in the art to combine the teachings of Elsom et al. and Towery et al. and utilize a pH of 0.5 to 11. It would have been obvious to one of ordinary skill in the art to manipulate the pH because Towery et al. teaches that stability is maintained through the pH. Therefore, one of ordinary skill in the art would have been motivated to optimize the pH and the resulting zeta potential to maintain a stable colloid suspension. It would have been obvious to one of ordinary skill in the art at the time of the invention to engage in routine experimentation to determine optimal or workable ranges that produce expected results. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or

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workable ranges by routine experimentation. **In re Aller, 220 F. 2d 454, 105 USPQ 233 (CCPA 1955).**

It would have been obvious to one ordinary skill in the art to combine the teachings of Elsom et al. and Dobkowski et al. and vary the particle size of the titanium dioxide utilized. One of ordinary skill in the art would have been motivated to manipulate the particle size of the titanium dioxide utilized in order to optimize the amount of whiteness which is associated with larger particles sizes as taught by Elsom et al. with increased sun protective activity as taught by Dobkowski et al.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding the claimed functional limitation of zeta potential, Elsom et al. and Towery et al. are silent as to the zeta potential. It is the examiners position based on the teachings of Towery et al. that the zeta potential is adjusted by the pH. Since the pH is adjusted to maintain a stable colloid suspension, it is the examiner's positions that the zeta potential of the prior art is the same if not similar to that instantly claimed. It is incumbent on applicant to demonstrate that the product of the prior art would not necessarily possess the same if not similar zeta potential.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elsom et al. in view of Gilges et al., Grinnell, Towery et al. and Dobkowski et al., and in further view of Bleckmann et al. (EP 1557153).

Applicant Claims

Applicant claims the dispersion has a viscosity of less than 2000 mPas at a shear rate of 100 s⁻¹.

**Determination of the Scope and Content of the Prior Art
(MPEP §2141.01)**

The teachings of Elsom et al., Gilges et al., Grinnell, Towery et al. and Dobkowski et al. are set forth above. Specifically, Elsom et al. discloses a sunscreen formulation comprising a blend of different particle size of titanium dioxide.

**Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)**

Elsom et al. do not specify the viscosity of the composition. However, this deficiency is cured by Bleckmann et al.

Bleckmann et al. is directed to sprayable sunscreens. It is disclosed that sprayable sunscreens prefer a viscosity in the range of 50 to 2000 mPas (paragraph 0014 of the English translation).

***Finding of Prima Facie Obviousness Rational and Motivation*
(MPEP §2142-2143)**

It would have been obvious to one of ordinary skill in the art to combine the teachings of Elsom et al., Gilges et al., Grinnell, Towery et al., Dobkowski et al. and Bleckmann et al. and utilize a viscosity between 50 and 2000 mPas. One of ordinary skill in the art would have been motivated to utilize this viscosity when formulating a

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sprayable sunscreen as it is the preferable viscosity when formulating these type of sunscreens as taught by Bleckmann et al.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicants argue that Elsom et al. neither discloses nor suggests increasing the size of their microfine titanium dioxide particles. Applicants argue that none of the secondary references remedy the deficiency of Elsom et al.

Applicant's arguments with respect to claims 1-8 and 12-13 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

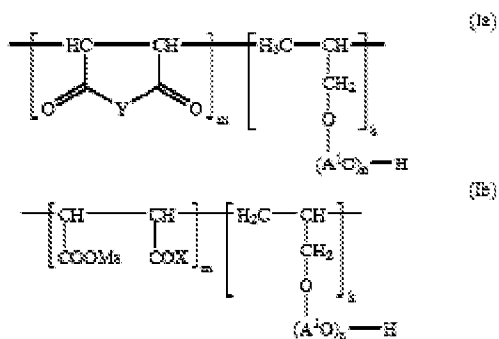
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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 4-8, 12-13 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/456276 in view of Grinnell (US Patent No. 5799978) and Dobkowski et al. (US Patent No. 5961961).

Copending application '276 claims an aqueous dispersion comprising metal oxide particles and at least one compound of formula I.



The aqueous dispersion comprises 20 to 60% microfine metal oxide particles. The metal oxide particles as claimed include titanium dioxide. The particle size of the particle size is between 10 and 100 nm. The viscosity is between 10 and 40000 mPas. The aqueous dispersion further comprises cosmetic auxiliaries and additives.

Copending application '276 does not claim including poly(phosphate) in the dispersion. Copending application '276 does not claim particle sizes greater than 100 nm. However, these deficiencies are cured by Grinnell and Dobkowski et al.

Grinnell discloses that to disperse pigments, which includes titanium dioxide, dispersing agents are utilized. The dispersing agents polyphosphate compounds such as tetrasodium pyrophosphate, sodium hexametaphosphate and sodium tripolyphosphate (column 5, lines 33-36).

Dobkowski et al. is directed to sunscreen compositions comprising titanium dioxide. It is taught that a boost in sun protective activity can be achieved by the inclusion of large particle size inorganic sunscreen agents (column 2, lines 34-37).

It would have been obvious to one of ordinary skill in the art combine copending '276 and Grinnell and utilize polyphosphate compounds such as sodium tripolyphosphate as the dispersing agent. One of ordinary skill in the art would have been motivated to utilize this dispersing agent because Grinnell teaches that it is a dispersing agent for titanium dioxide. It would have been obvious to one of ordinary skill in the art to try sodium tripolyphosphate as the dispersing agent as a person with ordinary skill has good reason to pursue known options within his or her technical grasp, such as dispersants of titanium dioxide. **Note: MPEP 2141 [R-6] *KSR International CO. v. Teleflex Inc.* 82 USPQ 2d 1385 (Supreme Court 2007).**

It would have been obvious to one of ordinary skill in the art to optimize the pH of the formulation. One of ordinary skill would have been motivated to do this because copending '276 is a cosmetic formulation and therefore will be applied to the skin. A pH

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too high or too low is known to cause skin irritation. Therefore, it would have been obvious to one of ordinary skill in the art to manipulate the pH to a physiologically compatible pH. Thereby resulting in the instant application with a reasonable expectation of success.

It would have been obvious to one of ordinary skill in the art to combine the teachings of copending '276 and Dobkowski et al. and vary the particle size of the titanium dioxide utilized. One of ordinary skill in the art would have been motivated to manipulate the particle size of the titanium dioxide utilized in order to optimize the sun protective activity when utilizing the particles in a sunscreen formulation as taught by Dobkowski et al.

This is a provisional obviousness-type double patenting rejection.

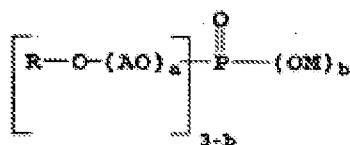
Response to Arguments

Applicant's arguments with respect to claims 1-2, 4-8, 12-13 have been considered but are moot in view of the new ground(s) of rejection.

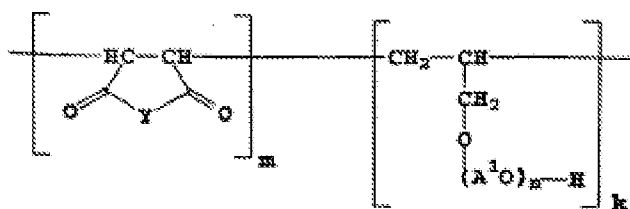
Claims 1-8, 12-13 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/512684 in view of Grinnell. And Dobkowski et al.

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Copending application '684 claims an aqueous dispersion comprising pyrogenically prepared oxide particles of metals. The dispersion particles are less than 250 nm. The dispersion contains at least one dispersant of formula I and/or at least one copolymer of general formula IIa.



I



IIa

The metal oxide particles include titanium oxide. The metal oxide particles in the dispersion are from 20 to 60%. The pH of the dispersion is in the range of 4.5 to 7.5. The zeta potential of the dispersions is less than -20 mV.

Copending application '684 does not claim including poly(phosphate) in the dispersion. Copending application '684 does not claim particle sizes greater than 100 nm. However, these deficiencies are cured by Grinnell and Dobkowski et al.

The teachings of Grinnell and Dobkowski et al. are set forth above.

It would have been obvious to one of ordinary skill in the art combine Copending '684 and Grinnell and utilize polyphosphate compounds such as sodium tripolyphosphate as the dispersing agent. One of ordinary skill in the art would have

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been motivated to utilize this dispersing agent because Grinnell teaches that it is a dispersing agent for titanium dioxide. It would have been obvious to one of ordinary skill in the art to try sodium tripolyphosphate as the dispersing agent as a person with ordinary skill has good reason to pursue known options within his or her technical grasp, such as dispersants of titanium dioxide. **Note: MPEP 2141 [R-6] *KSR International CO. v. Teleflex Inc.* 82 USPQ 2d 1385 (Supreme Court 2007).**

It would have been obvious to one of ordinary skill in the art to combine the etchings of copending '684 and Dobkowski et al. and vary the particle size of the titanium dioxide utilized. One of ordinary skill in the art would have been motivated to manipulate the particle size of the titanium dioxide utilized in order to optimize the sun protective activity when utilizing the particles in a sunscreen formulation as taught by Dobkowski et al.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

Applicants argue that (1) the claims of copending '684 may contain a phosphate dispersing agent that is different from and not suggestive of the polyphosphate of the instant invention. Applicants argue that (2) would have been no motivation for one skilled in the art to employ the particular phosphate of Grinnell in place of, or in addition to the phosphate of copending '684.

Applicant's arguments filed July 25 2008 have been fully considered but they are not persuasive.

Regarding applicants' first argument, since the rejection is made under nonstatutory double patenting rather than statutory double patenting the dispersing agents taught by copending '684 and the instant application do not have to cover exactly the same number of dispersants. Therefore, although copending '684 may contain a phosphate that is different from those instantly claimed does not prevent the copending application from overlapping in scope with the instant application.

Regarding applicants' second argument, copending '684 discloses utilizing poly(phosphate) dispersing agents for dispersing titanium dioxide. Grinnell discloses other poly(phosphate) dispersing agent utilized for dispersing titanium dioxide. Therefore, one of ordinary skill in the art would have been motivated to substitute or utilize the poly(phosphate) dispersing agents taught by Grinnell in copending '684 as the poly(phosphate) dispersing agents taught by Grinnell and copending '684 are taught as being utilized for the same purpose, dispersing titanium dioxide.

Therefore, the rejection is maintained since applicant has not provided any persuasive arguments to overcome the rejection.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIGAIL FISHER whose telephone number is (571)270-3502. The examiner can normally be reached on M-Th 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher
Examiner
Art Unit 1616

AF

/Mina Haghighatian/
Primary Examiner, Art Unit 1616